

8 Overview of Current Research Efforts

8.5 Collection of Micro-Scale Emissions Activity Data in the South Coast Air Basin - STI for CARB

8.5.1 Summary of workplan

A primary objective of this micro-scale activity project is to collect data on emission sources and the associated day of week activity around five monitoring sites (Azusa, Burbank, Lynwood, N. Long Beach, and Riverside-Rubidoux). These data will address differences between freeway and non-freeway activity patterns and seasonal differences in activity around the Azusa site. These data will be used later to address the relationships between 1) ambient air quality measurements and emission sources and 2) micro-scale activity data and regional activity data.

Task 1 - *Selection of Sites.* STI will work with ARB staff to select ambient monitoring sites that meet the criteria necessary to meet the objectives of the study.

Task 2 - *Revision of Workplan.* In consideration of ARB staff's review and comments on the Draft Workplan in the proposal, STI will revise and finalize the workplan.

Task 3 - *Collect and Compile Emissions Activity Data.* STI will identify all mobile and stationary emission sources within 2 km of the five selected ambient monitoring sites. Within these zones, STI will compile existing emissions activity data including CalTrans weigh-in-motion (WIM) data, major point source activity data, and off-road mobile source activity data. STI will also collect new emissions activity data including mobile source activity data for selected surface streets, phone and visual survey data for area source facilities, and operating schedules for area source facilities. STI will assemble all emissions activity data and digital site maps into ArcInfo GIS format with links to Microsoft Access databases containing the tabular emissions activity data.

Task 4 - *Quality Assurance and Data Analysis of Emissions Activity of Databases.* STI will implement a quality assurance protocol and statistical procedures to validate and summarize each data set.

Task 5 - *Prepare a Final Report.* STI will prepare a Final Report that fully describes the data collection, data validation, and data analysis efforts for each site individually and as a group. Raw data will be included as appendices.

8.5.2 Final report (report for CARB "Micro-Scale" activity contract (00-305) will be prepared as a combined final report with the "Macro-Scale" activity contract (00-313)).

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